

Before the
Federal Communications Commission
Washington, D.C. 20554

In re Application of)
)
Revision of the Commission's Rules to Ensure) CC Docket No. 94-102
Compatibility with Enhanced 911 Emergency)
Calling Systems)

To: The Commission

**REPLY COMMENTS CONCERNING APCO PETITION FOR
RECONSIDERATION OF VOICESTREAM WAIVER**

VOICESTREAM WIRELESS CORPORATION

Brian Thomas O'Connor, Vice President
Legislative and Regulatory Affairs

Robert Calaff, Corporate Counsel
Governmental and Regulatory Affairs

1300 Pennsylvania Avenue, N.W.
Suite 700
Washington, D.C. 20004

(202) 204-3099

October 17, 2000

Before the
Federal Communications Commission
Washington, D.C. 20554

In re Application of)
)
Revision of the Commission's Rules to Ensure) CC Docket No. 94-102
Compatibility with Enhanced 911 Emergency)
Calling Systems)

To: The Commission

**REPLY COMMENTS CONCERNING APCO PETITION
FOR RECONSIDERATION OF VOICESTREAM WAIVER**

VoiceStream Wireless Corporation ("VoiceStream") hereby replies to the comments and oppositions filed on October 10, 2000, in response to the petition for reconsideration of the Commission's *Fourth MO&O*¹ by the Association of Public-Safety Communications Officials-International, Inc. ("APCO").² The filings demonstrate why the Commission should reaffirm its grant of a waiver — the waiver will serve the public interest by making more accurate location data available at an earlier date and providing a path to full compliance with the Commission's Phase II requirements for VoiceStream's GSM system. Opponents of the waiver have failed to

¹ *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket 94-102, *Fourth Memorandum Opinion and Order*, FCC 00-326 (Sept. 8, 2000) (*Fourth MO&O*).

² Comments supporting VoiceStream's waiver and opposing APCO's petition for were filed October 10 by AT&T Wireless Services, Inc. ("AT&T Wireless Opposition"), Nextel Communications, Inc. ("Nextel Opposition"), and jointly by Motorola, Inc., Ericsson Inc., and Nokia Inc. ("Joint MNE Opposition"). Further supportive comments were filed by the National Emergency Number Association ("NENA Comments"). The only comments filed in this round opposing the VoiceStream waiver were filed by Allen Telecom, Inc. ("Allen Comments"). VoiceStream's initial Comments filed on October 10 addressed APCO's Petition as well as Comments filed on September 29 by Qualcomm Incorporated ("Qualcomm") in support of the petition.

show any valid basis for reconsideration. Moreover, reconsideration would disserve the public interest by producing uncertainty regarding Phase II compliance matters.³

Those in the public safety community who are most immediately responsible for E911 implementation — the National Emergency Number Association (“NENA”) — have urged the Commission not to disturb the waiver, even though NENA reiterates its concern regarding delays in implementation and acknowledges the procedural points raised by APCO. While NENA continues to emphasize the need for solutions that will enable PSAPs and emergency workers to locate and assist emergency callers, it concludes that the waiver was warranted: “[U]nder the special circumstances of this case, we believe that granting the waiver will move VoiceStream into ultimate compliance more quickly and with better results than would be the case if VoiceStream’s only alternatives were the existing network and handset solutions.”⁴

Moreover, NENA notes that its New Jersey members recognize that “VoiceStream’s predecessor, Omnipoint, essentially broke out ahead of other carriers and implemented Phase I in that state,” and the association “hope[s] that will turn out to be a precursor of success under the waiver.”⁵ Accordingly, NENA says that it “would prefer to see VoiceStream get on with implementation under the waiver,” noting that VoiceStream is continuing its testing program and has filed an initial report that is “upbeat” about the results of the NSS/E-OTD trial.⁶

³ In this case, a waiver was properly granted. Undoing the waiver on reconsideration would establish a damaging precedent — carriers and manufacturers would no longer make commitments until the Commission evaluates all proposed technical solutions and then makes final rule making technology determinations. This would reverse years of technological neutrality by the Commission in the E911 arena. Moreover, in circumstances like those at hand, where the record supports the waiver grant, reversal would undermine carriers’ justifiable reliance on Commission decisionmaking.

⁴ NENA Comments at 3.

⁵ *Id.* at 4.

⁶ *Id.* at 4, 3.

Allowing the waiver to stand will allow both VoiceStream and the vendors it relies upon to achieve a Phase II solution for the VoiceStream GSM network with the expectation that it will be approved if tests are successful. In this respect, NENA emphasized the need for certainty:

“NENA’s chief concern is for stability in the regulatory environment for wireless E9-1-1.

Wireless carriers facing an ALI technology choice November 9th . . . , and the vendors with whom they are interdependent, deserve reassurance that the ground will not continue to shift under them.”⁷ Wireless manufacturers echoed this need for certainty:

Once a waiver has been granted, it is absolutely critical and essential that the public policy requirements for that air interface stay stable if the Commission has any expectation that product can be ready in the timeframes established in the waiver decision. . . . [O]nce the Commission has reached a decision on the merits of an individual carrier’s implementation process, stability is necessary for efficient and effective integration into the marketplace.⁸

The manufacturers explained just how critical it is not to shift away from the conditions established for the VoiceStream waiver:

Building location-capable handsets is not a simple exercise. Meeting government-mandated deadlines in short timeframes requires shifting release dates, advancing field trials, trading out other planned-for features, redeploying software developers and code writers for every handset models and air interface. Given the brief time frame provided to meet the E911 Phase II requirements, Motorola, Ericsson and Nokia are already stretching their manufacturing capabilities to the limits to expedite the production of required equipment. With the conditional grant of the VoiceStream waiver, manufacturers finally have certainty in the timeline and production requirements for GSM network and handset equipment. If further changes are made for GSM, Motorola, Ericsson and Nokia cannot offer the Commission and VoiceStream an expectation that compliant equipment could be delivered in a timely fashion.⁹

⁷ *Id.* at 3.

⁸ Joint MNE Opposition at 2.

⁹ *Id.* at 2-3.

The manufacturers conclude with a warning that any changes to the VoiceStream waiver “will result in further delays in deploying location-capable product for GSM networks and will add further regulatory uncertainty in this proceeding.”¹⁰ Echoing this view, Nextel states:

Granting the petitioner’s request for reconsideration at this time will *not* promote Phase II compliance. On the contrary, by adding further uncertainty to an already complex issue, it will sabotage the ability of carriers and manufacturers to rely on the Commission’s actions and proceed to achieve Phase II compliance. Manufacturers cannot develop and bring Phase II solutions to market under constantly changing regulatory conditions.¹¹

AT&T Wireless emphasized the benefits to the public of the company-specific plan approved in the *Fourth MO&O* for VoiceStream: “[U]nder the waiver, *many more consumers will have access to Phase II service earlier than would be the case with GPS-enabled handsets . . . or network-based solutions.*”¹²

The sole commenter in this round that supports the APCO petition for reconsideration is Allen Telecom, a manufacturer of a wireless location system known as “Geometrix™”, which had been cited by Qualcomm in its early-filed comments as proof that there is “another compliant alternative for GSM carriers.”¹³ Allen Telecom’s comments, however, demonstrate clearly that Geometrix™ is *not* an existing compliant alternative for GSM carriers. The company states that “Allen’s system is currently designed to function with CDMA, TDMA, AMPS, and iDEN air interfaces” and expressly admits that “Allen’s technology is not immediately available for use with GSM systems.”¹⁴

¹⁰ *Id.* at 3.

¹¹ Nextel Opposition at 6.

¹² AT&T Wireless Opposition at 3-4 (emphasis added).

¹³ Qualcomm Comments at 5.

¹⁴ Allen Telecom Comments at 4.

Even though Allen admits it does not have a solution available for GSM carriers, it says it “could adapt its existing technologies for use with GSM systems fairly quickly if requested by a carrier.”¹⁵ Based on that assertion, it argues that the Commission “did not take into account alternative location solutions, such as Allen Telecom’s Geometrix™, that it claims could be adapted for use with GSM systems in a timeframe consistent with FCC Phase II accuracy and implementation requirements,” and that the waiver grant should be reversed.¹⁶

Allen Telecom criticizes VoiceStream for not engaging it to adapt its non-GSM product to the GSM air interface, claiming this amounts to a “rejection of existing viable technologies” that should disqualify VoiceStream from a waiver.¹⁷ As Mark Cosgrove, VoiceStream’s Director of R.F. Systems Engineering, explains in the attached Declaration, VoiceStream talked with many companies that had a non-GSM technology solution that might be adaptable to GSM, including Allen Telecom, but VoiceStream did not ultimately pursue a solution with the latter company. VoiceStream’s decision was based on the fact that Allen Telecom would not demonstrate that its solution was viable for GSM unless VoiceStream was willing to make a firm commercial commitment to its unproven technology.¹⁸ Allen Telecom would have faced considerable challenges in adapting Geometrix™ to GSM, and the company had performed no testing in the GSM environment. Because Allen Telecom would have to begin its GSM

¹⁵ *Id.*

¹⁶ *Id.* at 6.

¹⁷ *Id.* at 4.

¹⁸ When VoiceStream had initial discussions with Allen Telecom, the company had not yet begun GSM development work and had no detailed simulation or measurement data to support its claims. It did not have detailed technical information on its proposed GSM solution, such as how it would solve the problems of frequency hopping, or the details of the multi-beam antennas it would need for determining Angle of Arrival. After months of discussion, Allen Telecom informed VoiceStream that it would not begin developing a GSM solution without a firm commitment from VoiceStream to deploy its technology, and that remains its current position. *See Attachment.*

development from scratch, VoiceStream was concerned that the solution might not work or would be unduly delayed. Under the circumstances, therefore, VoiceStream judged Allen Telecom's GSM response to be lacking in the necessary technical and commercial detail.

VoiceStream believes it has made more progress toward Phase II compliance by relying on NSS/E-OTD than if it would if it had relied on Allen Telecom's claim that it could potentially "adapt" its existing non-GSM product to GSM. In terms of development, E-OTD was, and is, by far the more advanced product for GSM, and it would likely have taken a year longer for VoiceStream to come into compliance with the Commission's Phase II requirements if it had chosen to rely exclusively on Allen Telecom's product than will be the case under NSS/E-OTD.¹⁹ The fact that a disappointed vendor wishes to pursue a business deal should not be a basis for undoing a fully justified waiver, and the Commission should not support such an effort.

Importantly, Allen Telecom errs when it claims that the waiver here "would undermine the underlying purpose of the rule, which is to ensure that public safety response teams can accurately locate someone in the event of a life-threatening emergency." In fact, the waiver granted to VoiceStream was accompanied by conditions that ensure that the purpose of the rule *is* complied with and indeed enhanced. In the short term, public safety is furthered by making available to PSAPs considerably more detailed location information that is required under the Phase I rules. Moreover, in the long term, public safety is furthered by an approach that may

¹⁹ VoiceStream would have considered pursuing both NSS/E-OTD and Geometrix™ at the same time, in order to have alternative compliance paths in light of the uncertainties inherent in technology development, but Allen Telecom was unwilling to proceed on this basis, and will only commit to developing its technology for the GSM air interface if VoiceStream deployed it and effectively abandoned E-OTD. Nevertheless, Allen Telecom should be encouraged to develop its technology for GSM. Other GSM carriers may find that approach useful and, if unforeseen problems develop with NSS/E-OTD, VoiceStream would consider alternatives, including any GSM solutions that Allen Telecom may make available.

ultimately provide location accuracy closer to that of a handset-only solution than that of a network-only solution.

CONCLUSION

For the reasons set forth above and in VoiceStream's Opposition, the APCO Petition for Reconsideration of VoiceStream Waiver should be denied.

Respectfully submitted,

VOICESTREAM WIRELESS CORPORATION

/S/

By: _____
Brian Thomas O'Connor, Vice President
Legislative and Regulatory Affairs

Robert Calaff, Corporate Counsel
Governmental and Regulatory Affairs

1300 Pennsylvania Avenue, N.W.
Suite 700
Washington, D.C. 20004

(202) 204-3099

October 17, 2000

ATTACHMENT

Declaration of Mark Cosgrove

1. My name is Mark Cosgrove. I serve as the Director, R.F. Engineering, for VoiceStream Wireless, Inc. My credentials are set forth in the “Engineering Declaration of Mark Cosgrove” included as Attachment I to the Opposition to Petition for Reconsideration of VoiceStream Waiver filed by VoiceStream on October 10, 2000.

2. I am submitting this declaration to provide the background for VoiceStream’s decision not to rely on the potential adaptation and commercial development of the Geometrix™ system to the GSM air interface by its manufacturer, Allen Telecom, Inc.

3. I disagree with Allen Telecom’s suggestion that, just because we rejected their solution, we did not consider other solutions properly. VoiceStream talked to about nine or ten vendors, including Allen Telecom, during the past twelve months. In fact, as part of VoiceStream’s process of technology selection, we sent a Request for Pricing to Allen Telecom.

4. Like many of the companies we talked to, Allen Telecom did not have a product that had been demonstrated to work for GSM and, therefore, it would have to undertake significant hardware and software developments to make its current platform compatible with GSM.

5. Allen Telecom did not offer to share technical information with VoiceStream and requested a firm commercial commitment from VoiceStream before it would enter discussions. Allen Telecom would not commit to developing the system for GSM unless VoiceStream committed to deploy it and effectively abandoned E-OTD, which presented considerable financial, technical and commercial risks to VoiceStream and to our ability to meet the FCC’s requirements.

6. VoiceStream was given to understand that Allen Telecom would have been in the position to do a simple demonstration of its system for GSM by the end of this year and would be able to have a commercial GSM demonstration sometime in 2001. This is some 12 months behind the E-OTD development.

7. The GSM environment is very different than the CDMA environment in which much of Allen Telecom's product development work has taken place. VoiceStream believes that Allen Telecom would face some significant hurdles in developing for GSM, as Allen Telecom has no working system and, at the time, had performed no testing in a GSM system.

8. Allen Telecom did not share with VoiceStream how it would solve the problems of frequency hopping, nor did it provide the details of the multi-beam antennas it would need to deploy in order to do AOA (Angle of Arrival, one of the technologies used by Allen Telecom for its network-based solution).

9. In VoiceStream's judgment, Allen Telecom did not have a product that could be integrated into the GSM system to be practically implemented on a timely basis. Allen Telecom had no detailed simulation or measurement data to support its claims. Accordingly, VoiceStream could not ascertain the cost or deployment time of Allen Telecom's proposed solution.

10. VoiceStream also was unable to ascertain whether an Allen Telecom GSM product would comply with FCC accuracy requirements or could be deployed in accordance with the Commission's Phase II deadline, given that Allen Telecom would need to start its development effectively from scratch.

11. I have reviewed the "Reply Comments Concerning APCO Petition for Reconsideration of VoiceStream Waiver" and declare the factual statements therein, and the foregoing

statements, to be true and correct under penalty of perjury, based on personal knowledge, information, and belief.

/S/

Mark Cosgrove

Executed: October 17, 2000

CERTIFICATE OF SERVICE

I, Jeffrey Phoenix, hereby certify that on this 17th day of October, 2000, copies of the foregoing "Reply Comments Concerning APCO Petition for Reconsideration of VoiceStream Waiver," CC Docket No. 94-102, were served by first-class U.S. mail, postage prepaid, upon the following persons:

Michael R. Brown, President
International Association of Fire Chiefs, Inc.
4025 Fair Ridge Drive
Fairfax, VA 22033-2868

Dean R. Brenner, Esquire
Crispin & Brenner, P.L.L.C.
1156 – 15th Street, N.W., Suite 1105
Washington, D.C. 20005

Robert M. Gurss, Esquire
Shook, Hardy & Bacon, LLP
600 – 14th Street, N.W., Suite 800
Washington, D.C. 20005

Eliot J. Greenwald, Esquire
Alexander M. Stokas, Esquire
Swidler Berlin Shereff Friedman, LLP
3000 K Street, N.W., Suite 300
Washington, D.C. 20007

James R. Hobson, Esquire
Miller & Van Eaton, P.L.L.C.
1155 Connecticut Avenue, N.W., Suite 1000
Washington, D.C. 20036

W. Mark Adams, Executive Director
National Emergency Number Association
P.O. Box 360960
Columbus, Ohio 43236

Douglas I. Brandon, VP-External Affairs
AT&T Wireless Services, Inc.
1150 Connecticut Avenue, N.W., Suite 400
Washington, D.C. 20036

Howard J. Symons, Esquire
Sara F. Leibman, Esquire
Bryan T. Bookhard, Esquire
Mintz, Levin, Cohn, Ferris, Glovsky
and Popeo, P.C.
701 Pennsylvania Avenue, N.W., Suite 900
Washington, D.C. 20004

Robert S. Foosaner, Esquire
Lawrence R. Krevor, Esquire
Laura L. Holloway, Esquire
James B. Goldstein, Esquire
Nextel Communications, Inc.
2001 Edmund Halley Drive
Reston, VA 20191-3436

Mary E. Brooner
Director, Telecomm. Strategy & Regulation
Motorola, Inc.
1350 Eye Street, N.W.
Washington, D.C. 20005

Barbara Baffer
Director, Regulatory Affairs
Ericsson Inc.
1634 Eye Street, N.W., Suite 600
Washington, D.C. 20006

Leo R. Fitzsimon
Director, Regulatory and Industry Affairs
Nokia Inc.
1101 Connecticut Avenue, N.W., Suite 910
Washington, D.C. 20036

/S/

Jeffrey Phoenix